PERSISTENCE OF TORTILIA VIATRIX BUSCK

On September 18, 1933 a representative of a warehouse at Hoboken, New Jersey brought to the attention of the Bureau of Entomology and Plant Quarantine a moth which was present in large numbers in bagged senna leaves (about 645,000 pounds) imported from Sudan, Africa some one and one-half to three years previous.[1] The insect was described by Busck as *Tortilia viatrix.*[2] Arrangements were made for fumigation of this senna, and on November 17, 1933 this was accomplished using ''Carboxide'' (ethylene oxide-carbon dioxide mixture). The gas was used at the rate of 15 pounds of carboxide to 1,000 cubic feet of space. The length of exposure was 48 hours. Some few adult moths were present, though larvæ and eggs predominated. Twenty-two vials containing live insects were placed in various places throughout the baled senna, and all the check insects were killed. An inspection in August of 1934 revealed that there were many of the insects in the senna, though the fumigation had reduced the number considerably. On September 15, 1934 the senna was again fumigated with hydrocyanic acid gas, used at the heavy dosage of 2 pounds of sodium cyanide per 1,000 cubic feet of space. The exposure was for 25 hours. Again no sign of life was observed in the check vials. Since that time however the infestation has continued, adults being found in 1935, 1936, 1937 and 1938. The leaves are dry at this time to the point of brittleness, and the warehouse in which the material is stored is bone dry. Yet the infestation is continuing. It was Doctor Busck's opinion that ''the continued survival and spread of this species in America is not probable, though not necessarily excluded.'' He realized that since the insect had been able to maintain itself for several generations in the warehouse, climatic conditions would not be the determining factor in its survival. We agree with Doctor Busck that if the species finally disappears from America it will be due to the absence of stored senna and because it is not able to survive on our native Cassia, in the open.—F. A. Soraci.

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[1] Weiss, H. B., Rex, E. G. Outbreak of an African Moth in Stored Senna. Jour. Econ. Ent., vol. 27, No. 3, p. 557–558.

[2] Proc. Ent. Soc. Wash., vol. 36, No. 3, March, 1934.